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THE BIRDS OF CUSTER AND DAWSON COUNTIES, MONTANA.¹

BY E. S. CAMERON, F. Z. S. L., M. B. O. U.

134. **Poecetes gramineus confinis.** WESTERN VESPER SPARROW.—Tolerably common; arriving about the end of April. A few remain to breed. On June 17, 1896, I found a nest (a deep cup in the ground amidst the sage brush), containing three eggs of this sparrow and three of the Cowbird.

135. **Passerculus sandwichensis alaudinus.** WESTERN SAVANNA SPARROW.—Captain Thorne gives this bird as common and breeding. I have only come across it two or three times at the migration periods.

136. **Coturniculus bairdii.** BAIRD'S SPARROW.—An irregular fall migrant. I have observed this sparrow on the prairie in large numbers during September, but have no notes of its occurrence at any other time. A flock frequented the garden at my ranch, Custer County, in September, 1893. They were preyed upon by a Sharp-shinned Hawk, and by the cat, which on the thirteenth brought me two good specimens. Measurements in inches were: length $5\frac{1}{2}$; wing scarcely 3; tail $2\frac{1}{2}$; extent $9\frac{1}{4}$. Feet and legs flesh color, fading to pale brown. Bill flesh color, with culmen dark brown. Iris black. A large flock arrived at another ranch where I lived near Terry, on September 6, 1902, and remained for four days, thus affording an ample opportunity for watching them. These birds are very fond of perching on buildings and fences. Unless specimens are shot for identification it is often difficult to diagnose the countless flocks of migrant sparrows which flit through the sage brush. Nevertheless I believe that this species without yellow at the bend of the wing is much commoner than the previous bird. Baird's Sparrows came to drink at my water-troughs in Dawson County during September, 1905.

137. **Coturniculus savannarum perpallidus.** WESTERN GRASSHOPPER SPARROW.—Rare. I have seen this Sparrow once only, on September 16, 1904, when one came to my water-troughs in Dawson County, in company with Clay-colored Sparrows and Chipping Sparrows.

138. **Chondestes grammacus strigatus.** WESTERN LARK SPARROW.—Very abundant summer resident in both counties.

Lark Sparrows arrive early in May, and are the most pugnacious little birds I have ever seen. The cocks fight on the ground or in the air indifferently, and are then so oblivious to their surroundings that five or six fighting on the wing have nearly hit me in the face. When all other birds are suffocated by the heat, and even the doves are unable to coo, Lark Sparrows keep up their continuous harsh croaking and indulge in

¹ Concluded from Vol. XXIV, Oct., 1907, p. 406.

brief combats. On my first coming to Montana, these birds, so numerous and tame about ranch buildings and doors, reminded me of the sparrows on English farmyards. I have found their nests, which are invariably placed under a sage bush, and lined with grass, in pine hills, badlands, and open prairie. On an average the full clutch of five eggs is laid by the middle of June, and the young are fledged in the middle of July. The female incubates about twelve days. I have also seen eggs in July, but these were doubtless for a second brood. In the pairing season, the males give a sort of display, during which they bow, strut and spread their long tails.

139. **Zonotrichia querula.** HARRIS'S SPARROW.—Rare. I observed a single Harris's Sparrow associating with White-crowned Sparrows on May 24 and 25, 1907, near Knowlton, Custer County.

Captain Thorne has the following: "Seen only in the fall of 1889 (September 22, to October 13). All I took were juveniles."

140. **Zonotrichia leucophrys.** WHITE-CROWNED SPARROW.—Tolerably common in both counties. A very regular spring migrant. Notes kept for a number of years show that it almost always arrives during the first week in May, and may remain until the end of the month. To my knowledge, it has only once arrived in April — on April 21, 1900. These sparrows used to sit in the brush at my north window (see introduction), and lent by their presence a further charm to the flowering choke-cherries. In my opinion they are the handsomest sparrows which visit Eastern Montana.

White-crowned Sparrows are not often observed here on the fall migration, but I have a few records of their appearance about the end of September. I found them more numerous on October 1, 1893 (the occasion of the first snowstorm), than at any other time. Associated with Juncos, separate flocks were seen, at intervals, for a mile down the creek, on my ranch in Custer County. White-crowned Sparrows are birds of the river bottoms, and merely pass through the pine hills.

141. **Zonotrichia leucophrys intermedia.** INTERMEDIATE SPARROW.—Captain Thorne states that this sparrow is "tolerably common in spring and fall." I have not noticed it.

142. **Zonotrichia albicollis.** WHITE-THROATED SPARROW.—Rare migrant. I saw a pair on Fallon Creek, Custer County, September 6, 1896.

143. **Spizella monticola ochracea.** WESTERN TREE SPARROW.—Abundant on the migrations in both counties. May arrive at any time from the end of February to the end of March. I have not seen this sparrow in December or January, although Captain Thorne gives it as "usually abundant during the colder months." Very erratic, remaining for a few days or for a month.

On March 26, 1907, near Knowlton, Custer County, a flock of about 250 Tree Sparrows arrived early in the morning during a snowstorm. At first, this large flock split up into small companies of from 25 to 50 in each, which came boldly to the windows and doors, covered the roofs of the

buildings, and perched on the withered horse-weed stalks. Afterwards, they mixed with an army of Horned Larks, when this host of birds, numbering many hundreds, spread over some three acres of ploughed land which was entirely overgrown with Russian thistle — a most noxious weed. At the same date, a flock of about fifty birds frequented the adjoining ranch of Mr. J. H. Price. These sparrows remained during the entire month of April. Tree Sparrows are again seen about the middle of October, and immense flights, mixed with a few Juncos, then pass through the scattered pines. Their progress is slow, as the flocks constantly alight to feed on a plant which covers the hill sides; doubtless the same weed alluded to by Dr. Coues in his graphic account of Tree Sparrows feeding. (Birds of the Northwest, p. 147, 1874.)

144. **Spizella socialis.** CHIPPING SPARROW.— Very abundant summer resident. It may be seen in countless flocks on spring migration. One of the largest invasions of Chipping Sparrows was in 1893, when they arrived at my ranch in Custer County, on March 11, and continued to come in ever increasing numbers until the climax was reached on April 7, the occasion of a howling blizzard. Then an army of Chipping Sparrows and Desert Horned Larks, over a thousand strong, took possession of a disused garden to feed upon a wild plant with a seed like millet locally called "horseweed." All that morning a seemingly continuous stream of these small birds poured in, and, as I had never before seen so many together, I sallied out to watch them although scarcely able to face the storm. They were remarkably tame and Mr. H. Tusler, of the ranch above, twice caught three Horned Larks with a five-pronged stable fork, by laying it on another similar flock which visited him. The scene at my ranch was rendered still more interesting by the manoeuvres of three Marsh Hawks, a Sparrow Hawk and a Northern Shrike, which continually harassed this immense company of birds, but though they killed a good many Horned Larks I could not discover that any Chipping Sparrows were taken. Our cat, however, captured many specimens of the latter, which she brought to me.

Exceptionally large flights of Chipping Sparrows were noticed at my ranch in Dawson County in 1905 and 1906. In 1905, flocks of unusual size began to arrive on May 10, and on May 16 the birds, mixed with Clay-colored Sparrows, swarmed over the neighboring country. When we were riding through the hills at this date, the horses constantly flushed hundreds of both species from the sage brush at their feet. On May 17, 1906, Chipping Sparrows passed throughout the day, flying low to the northwest across a strong north wind. These late migratory movements have no connection with the resident birds, which arrive in March. Chipping Sparrows nest here in low cedars, but occasionally in sage brush, and rear two broods in the year. In July numbers may be seen feeding the full-fledged young upon grasshoppers, while others are sitting upon three or four eggs. I have never seen more than the latter number, and three is usual. The earliest date at which I have found eggs is May 28,

and the latest July 15. I have several times seen a Cowbird's egg among those of the sparrow.

At the water-troughs on my ranch in Dawson County there are excellent opportunities for observing the habits of these sparrows, as several pairs nest annually in the cedars which grow around them. The nests are usually slight, unfinished structures of dried grasses, but may be more elaborate with horse and cowhair interwoven. As with other birds here, the partially feathered nestlings suffer much from the sun's rays and the parents shade them. In July, 1904, an Arkansas Kingbird and a Chipping Sparrow sat on nests side by side in two opposite forks of the same cedar branch. I have never observed Chipping Sparrows here after the first week in November. This form is referable to *socialis* and not to var. *arizonæ*, as the adult males have the crown continuous bright chestnut.

145. **Spizella pallida.** CLAY-COLORED SPARROW.—Common sometimes on the spring migration; rare at other times. On May 16, 1905, hundreds passed in company with Chipping Sparrows when our cat brought in a good specimen. Measurements in inches were: Length 5; extent $7\frac{1}{4}$; wing $2\frac{3}{4}$; tail $2\frac{1}{2}$. Captain Thorne gives it in his list as breeding. I observed these sparrows at different dates during August and September, 1904, associating with Chipping Sparrows.

146. **Spizella breweri.** BREWER'S SPARROW.—Captain Thorne gives this sparrow as "Common, breeds." I have not recognized it.

147. **Junco hyemalis.** SLATE-COLORED JUNCO.—Common spring and fall migrant. Capt. Thorne states that some remain to breed but I have never found a nest. At my ranch in Custer County, Juncos arrived in large numbers early in April, and were exceedingly tame; they associated with Desert Horned Larks and Chipping Sparrows about the buildings. In April, 1893, the female of a pair which frequented the stable perched on a horse's ear, and in April, 1896, I twice caught a Junco in the stable with my hand. When the weather became warm they all departed to reappear again about the first of October. Juncos do not care to stay long in the pine hills, and I have only noticed small flocks of passing migrants at my ranch in Dawson County.

148. **Melospiza fasciata.** SONG SPARROW.—Rare. I have no records. Captain Thorne gives: "One female taken April 16, 1889."

149. **Melospiza lincolni.** LINCOLN'S SPARROW.—Rare. On May 10, 1897, two were seen in the shrubbery at my window (Custer County). On August 27, 1904, two came to my water-troughs in Dawson County. Captain Thorne saw it twice only in 1889.

150. **Pipilo maculatus arcticus.** ARCTIC TOWHEE.—Common in both counties. Nested on both my ranches. The average time of arrival is during the second week in May, the 6th being the earliest date I have recorded. The grass nests of Towhees are placed on the ground in clumps of wild roses or sage brush and contain four or five eggs. These are laid about the middle of June; nestlings are hatched at the end of the month, and fledglings may be seen flying about in August. All the birds leave at

the end of September. On June 20, 1898, I found a nest in a rose bush which contained five eggs of the Towhee and two of a Cowbird.

Towhees are very common in the woods along the Yellowstone bottom, but are shy birds, flitting about in dense cover, although their harsh croak resounds on all sides.

151. **Zamelodia melanocephala.** BLACK-HEADED GROSBEAK.— Captain Thorne records this species as "Tolerably common. Breeds." I have never seen it.

152. **Cyanospiza amoena.** LAZULI BUNTING.— Tolerably common summer resident in both counties. Appears to be a very irregular migrant, as I have recorded its appearance at varying dates from April 19 until the middle of June. I never saw it in Montana until 1896. Lazuli Buntings nest in the hollows of dead pines in places similar to those chosen by Flickers, and also use the deserted nesting holes of other species. On June 12, 1904, six young flickers fell victims to some predatory animal (it was supposed to be our cat), in their hole in a burnt pine near my house in Dawson County. Thereupon a pair of Lazuli Buntings made their nest of dried grass, lined with feathers, in the same situation on July 2, and four eggs were laid. Another pair took possession of a hole in a dead pine which in the previous year (1903) had been occupied by a pair of Chickadees. I once found the nest of Lazuli Buntings in a hole in a sand rock cliff, but this struck me as a rare occurrence. The full complement of eggs is five. Lazuli Buntings hover like Kestrels on the open prairie when searching for grasshoppers or grubs on which to feed their young. They leave about the first of October.

153. **Calamospiza melanocorys.** LARK BUNTING.— Commonest of the summer residents in Custer County, arriving about the second week in May. It is invariably called Bobolink, and is confused with that bird. The males precede the females by about five days and, when all have arrived, flying hosts are seen strung out for about a quarter of a mile. Lark Buntings are common in Dawson County, but I have not noticed them in such immense numbers as in Custer. Although essentially prairie birds, the flocks rest in the trees when migrating through pine hills. Their nests are more plentiful in fenced pastures than elsewhere, a fact explained by the bird's fondness for perching on the wires. I have observed five nests in one small pasture when riding through it, and, had search been made, doubtless many more might have been discovered. The usual number of five eggs is laid by June 1 and the male shares the duties of incubation with his mate. The young are fledged by July 1, and, as soon as they can fly weakly (about the middle of the month), sit on the wires with their parents which feed them on grasshoppers. A nest on my ranch in Custer County, contained three eggs on May 25, seven eggs on May 29, and six newly hatched young on June 10, which makes the time of incubation about twelve days. Before the flocks leave in the fall the males have assumed the plumage of the females.

The Lark Bunting sings loudly on the wing and, as Dr. J. A. Allen has

pointed out: "In its song and the manner of its delivery it much resembles the Yellow-breasted Chat [*Icteria virens*], like that bird rising to a considerable distance in the air, and poising itself by a peculiar flapping of the wings during its utterances, then abruptly descending to the ground to soon repeat the manoeuvre." (Birds of the Northwest, by Elliott Coues, p. 164, 1874.)

154. **Progne subis.** PURPLE MARTIN.—Not common. Martins have nested for many years at the ranches of Messrs. Heywood, Daly and Harry Schlosser near Knowlton (Custer County) where boxes have been provided for them. The birds arrive about May 15. Mr. and Mrs. Bowman have watched Bronzed Grackles stealing their eggs. Mrs. W. S. Haley has observed Purple Martins in Dawson County. Two were seen by me among cottonwoods of the Yellowstone near Terry on June 7, 1905. Dr. J. A. Allen found Purple Martins more or less frequent along the Yellowstone from the mouth of Tongue River to Pompey's Pillar, August 1st to 15th.¹ In his 'Birds of Fort Custer' (which four years ago was within Custer County boundaries), Dr. Edgar A. Mearns gives them as "Numerous in the timbered river bottom."²

155. **Petrochelidon lunifrons.** CLIFF SWALLOW.—Very abundant in both counties. My records show that it arrives at varying dates from May 7 to May 27. Nests in colonies on buildings at almost all ranches where allowed to do so, in the badlands, and against vertical cliffs above the Yellowstone. There have always been large colonies nesting around the Northern Pacific engine tank and section house at Terry. Two broods are raised in the year. Mr. Walter Lindsay, of the Cross S ranch on Mizpah Creek, informed me that in 1888, a rattlesnake climbed the veranda poles and devoured all nestling swallows within reach.

Some ranch owners unwillingly sweep down Cliff Swallows' nests under the impression that their presence brings bedbugs into the houses. While this is denied by scientists I am compelled to believe it, as so many impartial investigators have assured me that the introduction of such vermin synchronized with the first nidification of the birds.

156. **Hirundo erythrogaster.** BARN SWALLOW.—Common in both counties. Records kept since 1893 show that the average date of arrival near Terry is May 13. This is one of the best known birds; I think it would be impossible to find a ranch without swallows nesting in the stable or outbuildings, and even in rooms to which they can gain access. Barn Swallows generally rear two broods a year, of four or five in each, and the last nestlings may not be full-fledged until the end of August. The young birds fly about during the day but return to their nest at night, and those that cannot find room inside sit about near it on the stalls. I thought it a remarkable circumstance that in 1902 a single pair of swallows built two nests in my stable near Terry, the second above the other and a little

¹ Notes on the Natural History of portions of Montana and Dakota, 1874.

² Condor, Vol. VI, p. 21, 1904.

to the left. When the five nestlings became full-feathered (on August 2) they were inconveniently crowded, and two contrived by some means to reach the upper nest, remaining there until August 9, when all could fly.

157. **Iridoprocne bicolor.** TREE SWALLOW.—Rare. Dr. J. A. Allen found this swallow: "Common at one locality on the Musselshell, but not seen elsewhere."

Captain Thorne mentions that some of these swallows nested at Fort Keogh. I never happened to recognize this species in Montana, although I have seen it just across the line in Wyoming. Mr. Dan Bowman has observed these birds on the Powder River and recollects a pair having a nest in the roof of an old shed in the eighties. He further informs me that during the end of May, 1894, a pair of Tree Swallows frequented a Martin box on a high pole, placed by a cottonwood, on his Powder River ranch. The hopes that they would nest there were not fulfilled.

158. **Tachycineta thalassina lepida.** NORTHERN VIOLET-GREEN SWALLOW.—Dr. J. A. Allen met with this species "near the mouth of Tongue River, and frequently on the Yellowstone above this point." In his 'Birds of Fort Custer' Dr. Edgar A. Mearns gives this swallow as: "Abundant along the bluff bank of the Bighorn River." Mr. Dan Bowman has seen it on the Powder River but cannot give dates. I have not observed it.

159. **Riparia riparia.** BANK SWALLOW.—Not common. Dr. J. A. Allen found a "large colony on the banks of the Yellowstone, near the mouth of Custer Creek (Custer County). Here full-fledged young were obtained August 1st." At the present time I only know of one colony, in a cut-bank on a tributary of Whitney Creek, Custer County. Other nesting sites I have come across were deserted, but Mr. Dan Bowman has seen colonies elsewhere. This is the same bird as the Sand Martin in Great Britain.

160. **Ampelis garrulus.** BOHEMIAN WAXWING.—Abundant. A most interesting and predominant winter resident. I have met with large flocks everywhere in both counties from the Powder River to the Missouri. "Professor Baird mentioned that Mr. Drexler saw 'millions' on Powder River, in flocks rivalling in extent those of the Wild Pigeon."¹

Bohemian Waxwings arrive about the end of October and leave about the end of March, thus being with us for five months. At my ranch near Terry flocks came to my north window, where the bright-plumaged birds presented a charming sight from within the room as they picked off the remnant of withered cherries amid the snow-weighted cotton of the clematis. In Dawson County Waxwings were constant visitors to my water troughs. They are among those species which always try to get water even when deep snow covers the ground. At Knowlton during the severe winter of 1906-07 a flock came regularly to a large open spring at Messrs. Archdale's ranch. When hunting mule deer on Cedar Creek (which

¹ Birds of the Northwest, by Elliot Coues, p. 92, 1874.

risers in Custer County, but runs into the Yellowstone in Dawson County) I had daily opportunities of observing thousands of Waxwings which frequented the extensive thickets surrounding my camp. Here they subsisted entirely on cedar berries, which have a sweet taste and tinge the excrement of the birds red, so that familiar roosting places in the high pines are infallibly marked by the red-stained snow beneath. In general the winter food of Waxwings consists of cedar berries, buffalo berries, and wild rose hips, in this respect entirely coinciding with that of Sharp-tailed Grouse which are also very numerous in these woods. The latter birds were a great nuisance to me when still-hunting deer, for, although the complacent Waxwings never gave the alarm, the Grouse, when disturbed, flew into the trees in a spray of snow and with a most unnerving cackle — a signal for all the deer within ear shot to “quit the country.” When following a fresh deer trail a flock of Waxwings would shoot over an opening but a few feet above my head, and alight, despite my presence, to pick off the berries near at hand. On these occasions I have seen the old birds feed the young ones as late as the end of January. The loud rushing noise of their wings swept through the silent cedars with a familiar and welcome sound which the deer were unaccustomed to associate with danger. As these Waxwings had no fear of man, their perplexing plumage could be examined at very close range. Only a small proportion had yellow primary bands; in the great majority these were white. Most birds had no red sealing wax appendages visible and were presumably the young of the year. Others, besides showing white edging to the ends of all the primaries except the two first, had four wax tips on the secondaries. These may have been birds of eighteen months old which had moulted twice, having regard to the fact that the Waxwing moults only once a year — in October. A few of the birds had brilliant yellow wing-bars and numerous vermilion appendages, and I concluded that this small minority were old birds. “The fullest information on this subject is to be found in a paper by the late Henry Stevenson of Norwich, published in the ‘Transactions of the Norfolk Naturalists Society’ (Vol. III, pp. 326–344). He dissected sixty-eight specimens of the Waxwing — forty-one males and twenty-eight females — and found that the number of waxlike tips on the wing feathers is variable. Of the males examined, three had four tips; seven, five; fourteen, six; fourteen, seven; and three, eight tips. Of the females one had two tips; four, three; seven, four; six, five; seven, six; two, seven; and one, eight tips.”¹

Waxwings, more than any other small birds here, appear to fly for the mere pleasure of flying. When snow lies thick upon the branches of the cedars, and is held imprisoned between the needles of the pines, while in the frosty air outside long streamers of blue, red, and yellow light radiate from the sun, these birds are constantly on the wing. The flock selects a

¹ Natural History Editor of London Field, Feb. 18, 1893, in reply to a correspondent.

tree from which at intervals the birds gyrate in widening circles, sometimes altogether and sometimes only a part of them, as though impelled to exercise for the sake of warmth on such a wintry day. They seem to prefer dead trees, most likely because the view from them is less obstructed, and are so densely massed that an incredible number might be killed by a shot. Although they habitually rest in trees, I have twice seen a large flock alight on the ground, but regard this as very unusual. Waxwings have always an abundance of food, and can support extreme cold as well as any of the circumpolar birds. Nevertheless, at times I have seen them greatly affected by it. Some such days indeed I shall always remember, one especially in January, 1896, when a blizzard from the north, combined with the low temperature of 31° below zero Fahrenheit and deep snow, made discouraging atmospheric conditions. Not caring to stay in camp, and wanting meat, I had gone out on foot in the endeavor to shoot a deer. The whirling snow from below met that driven from above, so that an encompassing snow-cloud hid all objects outside the cedars, while the view inside, usually curtailed, was now clearest in their sheltering depths. As may be supposed, all the animals on the adjacent plains had crowded into this haven, even such unlikely visitors as antelope and Sage Grouse. I saw altogether nine deer, one in picturesque pose eating cedar berries only a few yards distant, but so intense was the cold I found it impossible to discharge my rifle. On this day and other similar days, the Sharp-tailed Grouse never left their burrows at all, and the Waxwings were so stupefied as scarcely to move out of my way in the brush. It is in weather of this kind that they become the prey of ranch cats. A very fine male which our cat brought to me on Feb. 13, 1899, was quite fat after eighteen days of a cold wave during which 45° below zero was registered. I do not think that many Waxwings fall victims to Prairie Falcons, as they betake themselves to thick cover when the latter are about. On March 6, 1904, my wife and I approached within two yards of a flock of Waxwings, which refused to leave a low cedar when a Rough-legged Hawk was sailing above. The winter of 1906-07 was the most severe in my Montana experience, and Waxwings, tamed proportionately to the cold, frequented the haystacks and corrals at Knowlton in company with flocks of Horned Larks and Snowflakes. They even entered the town of Miles City, and Mr. H. B. Wiley wrote, under date of Feb. 4, 1907: "I found a bunch of about fifty Bohemian Waxwings in my yard eating the frozen apples."

As the migration period approaches Waxwings become very restless and fly backwards and forwards with great swiftness. Unusually warm weather deceives them into the belief that spring has come, when they adopt a direct mode of flight instead of circling. When flying the birds keep up an incessant twittering, so that high passing flocks are immediately recognized by their call of *zir-r-r-r* — a sort of trill. Seebohm writes the notes *cir-ir-ir-ir-re* and compares them to the song of the Redpoll.¹ The

¹ British Birds, Vol. II, p. 5.

weak voice of a single Waxwing is inaudible except at very close quarters, but hundreds together produce quite a volume of sound.

161. ***Ampelis cedrorum***. CEDAR WAXWING.—Tolerably common summer visitor in both counties. Notes kept from 1894 show that it arrives regularly during the first week of June, and once (in 1906) on May 31. Very few pairs remain to breed but transient flocks, of from twenty to thirty birds, occur which make a twittering similar to the Bohemian Waxwing. Two or three pairs of these flocks remained throughout the summer on my ranch (Custer County), which was a favorite haunt of Cedar Waxwings, both on account of the thickets of wild fruit trees and the abundance of water and shade on which these birds seem very dependent.¹

At the time of writing (1907) I am not aware that Cedar Waxwings (which are the latest breeders of any birds here) nest anywhere else in the two counties. In August, 1899, I paid particular attention to Cedar Waxwings, as a small flock of twenty birds had been about the ranch since June 1. One pair made a nest in a thicket below the house and the female was sitting on three eggs on August 19. The nest would not have been discovered but for the actions of the male bird which was constantly perched on the top of an old box elder which towered above all the other trees in the grove. This induced me to search diligently below until I found the nest, a large structure of coarse grass and twigs, which was interwoven with four small shoots of a young box elder and thus held tightly against the parent stem. The young Waxwings seemed to mature very quickly, for although their feathers had only just begun to show on August 26, on September 2 I saw them leave their nest and all fly up into the tree at my approach. In color they were plumbeous gray, with some black about the head, a yellow border to the tail, but no sign of a crest. The whole family remained in the vicinity of the nest for some days, and I saw the parents feeding the young on grasshoppers, which are the universal 'stand-by' of almost every bird here.

These Cedar Waxwings had an extraordinary characteristic, that of drawing themselves to their utmost height, and standing perfectly rigid on a branch with closed eyes, when they appeared dazed or blind. I have remarked this practice in caged canaries, but never before in wild birds. The female indulged this habit to a ridiculous extent, before her nestlings were fledged and, whereas the more wary male took care to keep well out of my reach, she allowed me to set up a camera a few feet away, and to move around her as close as I pleased without taking any notice unless almost touched. In this respect the newly fledged young imitated her. Perched in a row along a branch, with the male higher up in the tree, this was indeed the most impassive bird family I have ever seen. An attempt to catch a fledgling could alone arouse them from their trance, in which event the excited parents would alternately raise or depress their

¹ See introduction, Auk, Vol. XXIV, p. 246.

crests, while all the birds would start in chorus with their "low lisping call."

162. **Lanius borealis.** NORTHERN SHRIKE.—Not common but seen at intervals in fall, winter and spring. It possesses great strength, and will attack birds as large as itself. On April 8, 1893, I saw an impaled Horned Lark in a Shrike's larder on a low bush. On March 26, 1904, I saw a Shrike hawking a Redpoll just as a Falcon would do. The unfortunate Redpoll ringed higher and higher in vain efforts to keep above its pursuer, which, after twice almost seizing the quarry in mid-air, compelled it to fly straight for about half a mile. The exhausted Redpoll then took refuge in high sage brush closely followed by its assailant. On October 16, 1906, a Tree Sparrow pursued by this Shrike found refuge in the cedars surrounding my water-troughs in Dawson County. Its victim having escaped, the Shrike sat on a branch and permitted me to examine it at close range.

This Shrike has a pleasing song which may be heard in winter after all the migratory song-birds have left.

163. **Lanius ludovicianus excubitorides.** WHITE-RUMPED SHRIKE.—Common and ubiquitous summer resident of both counties. One of our tamest and most confiding birds which alights on the wood pile, or any where at the ranch door in close proximity to human beings. There were usually two Shrikes' nests on Ash Creek, on which my ranch near Terry was situated. A nest found June 25, 1894, containing five young birds nearly ready to fly, was wedged between two upright cottonwood stems above the water, and appeared to be in a precarious situation. It was, however, really supported from below by a small snag.

In 1898, this peculiar site was again chosen by the Shrikes, and six eggs were laid by June 16. Another nest near the above, in the fork of a box elder, contained three newly hatched nestlings at the same date. These birds kept well out of the way when I was in their vicinity, and thus differed from another pair which nested annually in a cedar on my Dawson County ranch. The latter fiercely resented any approach to their nesting site, and would fly straight at me, chattering and snapping their bills, on the few occasions that I disturbed them. Indeed, after the young were hatched, it was necessary to protect my head from the female with my hands.

164. **Vireo olivaceus.** RED-EYED VIREO.—Tolerably common on the spring migration. I have not found it breeding in either county. In his list above quoted Dr. J. A. Allen states that this species is "Common wherever there is timber, from the Missouri to the Musselshell." A mixed flock of these Vireos and Yellow Warblers arrived at my ranch (Custer County) on May 20, 1893. (See also No. 165.)

165. **Vireo gilvus.** WARBLING VIREO.—Tolerably common in spring. Captain Thorne says that it breeds, but I have not found a nest nor observed this bird after the end of May. On May 16, 1899, at my ranch (Custer County), a flock mixed with Red-eyed Vireos were flying north,

when some entered the open door of the netted-in veranda and became prisoners.

Warbling Vireos were visitors to my water-troughs in Dawson County. I have noticed them eating wild rose leaves.

166. **Helminthophila celata.** ORANGE-CROWNED WARBLER.— Captain Thorne gives this warbler as "common in April and May." I have seldom seen it. About half a dozen of these birds were observed by me associating with Yellow Warblers at Mr. J. H. Price's ranch (Knowlton) on May 27, 1907.

167. **Dendroica æstiva.** YELLOW WARBLER.— Abundant summer visitor to both counties, arriving about the middle of May. Scarce in the pines. Nested all over my ranch near Terry in trees or bushes indifferently. Of four nests examined in the brush at our north window on June 22, 1893, two contained young birds. Their mothers showed many signs of distress, and performed antics in the bushes near to attract my attention. These nests were beautiful soft cups, of dried grass with wool and hair interwoven, placed in the forks of saplings. One nest enclosed a young choke cherry, and another small dead tree as well.

168. **Dendroica coronata.** MYRTLE WARBLER.— Tolerably common on the spring migration but usually met with in small numbers. A flock was seen on Whitney Creek (Custer County), associating with Yellow Warblers, on May 7, 1893. Another flock appeared at my ranch near Terry on May 2, 1894. I have noticed this warbler in the pine-hills and river valleys alike.

169. **Dendroica striata.** BLACK-POLL WARBLER.— Captain Thorne gives this bird as "Common in May." I have not observed it.

170. **Dendroica townsendi.** TOWNSEND'S WARBLER.— Rare. I saw the bird for the first time on May 18, 1894, when an adult male came to the north window of my ranch in Custer County. Like the Redstart it was strongly attracted by the flies inside the glass, and remained for a considerable time in the bushes and creepers which grew almost against it. I was thus enabled to watch the lovely warbler from within the room. On May 11, 1896, the same bird (or another) was again observed under exactly similar circumstances.

171. **Seiurus aurocapillus.** OVEN-BIRD.— Rare. Captain Thorne took a male on July 23, 1888. I have not seen it.

172. **Seiurus noveboracensis notabilis.** GRINNELL'S WATER-THRUSH.— Rare. Captain Thorne mentioned: "One juvenile taken Sept. 12, 1889." On May 24, 1905, I observed a single bird in cottonwoods along the Yellowstone at Mr. W. S. Haley's ranch in Custer County.

173. **Geothlypis trichas occidentalis.** WESTERN YELLOW-THROAT.— Dr. J. A. Allen found this species "More or less common along all the wooded streams, from the Missouri to the Musselshell, and quite abundant at favorable localities." Captain Thorne has a record of four examples in spring. I have not come across it.

174. **Icteria virens longicauda.** LONG-TAILED CHAT.— Common sum-

mer visitor along the rivers and creeks, arriving about May 25. Accidental in the pines. Breeds. During the pairing season the male is conspicuous in the tree tops and has a loud song of much sweetness although each passage ends in a croak. While nesting the birds become very retiring in their habits and are rarely seen. A nest found June 11, 1894, in a thicket of wild roses and gooseberry bushes, on the bank of the Yellowstone, contained three eggs of the Chat and one egg of a Cowbird. A Long-tailed Chat came to our north window on May 25, 1893, and endeavored to reach the flies through the glass. We therefore killed a number of blue bottles, which were threaded on a string and hung outside the window. The bird then performed a number of strange antics in order to release the flies, recalling the Old World Robin (*Erithacus rubecula*), both by its confiding manners and habit of looking at us with its head on one side.

The aerial evolutions of Long-tailed Chats during and after the nesting season are very remarkable. As I rode at my ranch (Custer County) on July 9, 1894, five Long-tailed Chats were crossing an extensive area of trees and brushwood below me. The first bird noticed I mistook for a detached leaf, but, on looking again, I saw the other birds, which ascended to a certain distance with a jerky, butterfly motion, then drifted aimlessly into the bushes like so many dead leaves.

175. **Wilsonia pusilla.** WILSON'S WARBLER.—Rare. Captain Thorne records: "One male May 19, 1889." I have not seen it.

176. **Setophaga ruticilla.** AMERICAN REDSTART.—Tolerably common summer visitor. Rare, or casual, in the pines. Undoubtedly breeds, although I have not happened to find a nest. A pair remained during the summer of 1907 on Mr. J. H. Price's ranch but search for the nest was made too late. Captain Thorne has taken young birds by July 24. On May 25, 1893, a female Redstart made persistent efforts to reach the flies inside my window through the glass at my ranch near Terry. The males appear to arrive before the females.

177. **Anthus pensilvanicus.** AMERICAN PIPIT.—Not common. Occasional spring and fall migrant in small flocks. Pipits are most often seen here about the end of April in the ploughed land, as they are fond of following the plough and seeking their food in the freshly turned up earth. They also alight on the wire fences. On the prairie in fall, Pipits associate with Horned Larks and Longspurs, when they can always be recognized by their buff underparts.

178. **Cinclus mexicanus.** AMERICAN DIPPER.—Rare. Mr. J. H. Price has observed this bird at different dates on Locate Creek in summer. I have no notes of the Dipper in Montana, although I have observed it on Tongue River, just across the line in Wyoming, where it breeds.

179. **Oroscoptes montanus.** SAGE THRASHER.—Rare. In his report to the Secretary of War on the Montana collections made in 1873, Dr. J. A. Allen mentions Sage Thrashers as seen at distant intervals on the divide between the Musselshell and Yellowstone.¹

¹ Notes on the Natural History of portions of Montana and Dakota. By J. A. Allen, Naturalist of the Expedition.

In his list of Birds of Fort Custer¹ Dr. Mearns gives the Sage Thrasher as "Common." Captain Thorne saw two on Tongue River in August, 1890, and secured one. Neither I nor any of my correspondents have met with this bird.

180. **Galeoscoptes carolinensis.** CATBIRD.—Common summer visitor along the rivers and creeks. Rare or casual in the pines. More nests of this species were to be found on my ranch near Terry than of any other bird.

181. **Toxostoma rufum.** BROWN THRASHER.—Common along the rivers of both counties; scarce in the pines. Dr. J. A. Allen found the Thrasher "more or less common everywhere in the thickets along the streams from the Missouri to the Musselshell."

This splendid songster arrives about the first week of May and begins to sing in the middle of the month. As far as my observations go the Thrasher is silent while the female is incubating, and, as she is usually sitting hard in the second week of June, the song can be heard only for a period of about three weeks. Thrashers nest in the wild plum and choke cherry thickets here, or in the willows along the banks of the Yellowstone. They bred regularly on my ranch in Custer County, and in June, 1894, there was a nest in the bushes at my north window. Four eggs are laid.

The Thrasher is the only singer in Eastern Montana which can vie with the Old World Thrush or Blackbird — even with Philomela herself, but for a harsh note produced after the most beautiful passages. Like the Nightingale, the Thrasher sings at night, when other birds are silent, as well as by day, although several species do so occasionally — notably the Meadowlark. As may be inferred from the above, the Thrasher has a powerful and melodious voice, which is equally entrancing when heard from the topmost branches of a pine or from the lowest depths of some tangled copse. Although considered as only an aberrant Thrush by ornithologists the Thrasher's song cannot fail to remind the pilgrim of the Song Thrush (*Turdus musicus*), which, according to Dixon, is the finest of British feathered musicians.² Comparisons are frequently made between the song of the Old World Thrush and that of the Nightingale and I have referred the point to my brother who has had considerable opportunities for hearing both. He says: "The Song Thrush is frequently heard in full song after sun-down, and in the stillness of night this song is frequently mistaken for that of the Nightingale by those who have heard both. Obviously, therefore, the two may be compared. On the other hand, if the two birds *be heard simultaneously*, no possible mistake can be made as to which is Thrush and which Nightingale, and, in my opinion, no comparison seems reasonable at such a moment. We yield at once to the magic spell of 'the thrilling song which has been the theme of poets of all ages.' When at Trinity College, Oxford, in the seventies, I had the good

¹ Condor, Vol. VI, 1904, p. 21

² See as quoted in 'British Birds' by Henry Seebohm, Vol. I, p. 216.

fortune to occupy rooms looking out upon the beautiful gardens, and happened frequently to be awake at dawn. In the summer term the birds which thronged in the gardens were heard to the greatest advantage shortly after sunrise, and I used to take pleasure in discriminating the various notes of the feathered instrumentalists in this bird symphony. As a rule, the orchestra was in full swing when the Nightingale entered the 'partition' and I can truthfully affirm that he dominated the melodious sea of bird-tone just as effectually as three trombones can and do dominate all the strings of Wagner's immense orchestra. I have no desire to imply that the Nightingale resembles the trombones except in the patent fact that once he 'chips in' upon the other birds — as many thrushes as you please — you've got to listen to *him* or shut your window."

182. **Salpinctes obsoletus.** ROCK WREN.—Summer visitor to both counties. Abundant in the badlands, and on ranches near them replaces the House Wren about buildings. Like the latter, the bird is exceedingly tame and confiding and so falls an easy victim to predatory animals. On August 23, 1906, I interfered to save a Rock Wren from the clutches of a Sparrow Hawk which stooped at it just below my window where I sat writing. Rock Wrens arrive about May 15, and begin nesting soon after. They excavate any small hole selected in a steep cut bank or butte, to a depth of six inches, in which a nest is made of dried grass or weeds which may grow near. One nest was constructed almost entirely of a brittle weed which grows in the badlands. Six, seven, or eight eggs are laid. July 3 is the earliest date on which I have seen full feathered young, but nestlings may be fledged any time between this and the beginning of August. At first their plumage is slate-colored above, showing traces of cinnamon, head brown, entire underparts buff, legs pink, but in about a month approximates to that of the parents. Both the latter feed the nestlings assiduously, chiefly on grasshoppers and green caterpillars. Owing to their habit of choosing holes under the overhanging edges of washouts, the nests of Rock Wrens are exposed to annihilation from the frequent land slides. I know of one nest, containing seven eggs, which was thus engulfed, when the sitting bird must have perished, and perhaps her mate as well.

183. **Thryothorus ludovicianus.** CAROLINA WREN.—Rare. Of this bird Captain Thorne writes: "Two in May on the divide between Powder and Tongue Rivers. One in May and two in August at Lame Deer, Montana." I have not seen it.

184. **Troglodytes aëdon aztecus.** WESTERN HOUSE WREN.—Common summer resident. Nests in all kinds of places, but usually in the holes of trees along the rivers and creeks. Replaced by the Rock Wren in rough pine hills or badlands. An occasional wanderer to my water-troughs in Dawson County. In June, 1893, at my ranch (Custer County) one pair of wrens nested in a hole in a box elder, while another pair occupied the shelf inside an outbuilding. In the latter case the birds made an immense barricade of sticks and the young were full fledged on July 31. On July 1,

1905, near Knowlton, a pair of Wrens were feeding their nestlings in the deep fissure of an uprooted pine which had fallen across a spring. A mass of twigs and bullberry thorns had been placed to protect the nest where the crack was widest. I have found the female wren utterly fearless; she would feed her young continually despite my presence.

185. *Sitta carolinensis aculeata*. SLENDER-BILLED NUTHATCH.— Not common. Dr. J. A. Allen mentions this bird as "observed at rare intervals, both on the Yellowstone and Musselshell." Captain Thorn "saw six and took two at Lame Deer, Montana." I have only seen these Nuthatches in the Missouri Brakes, and among the pines around Knowlton where they breed. On July 1, 1905, I observed two old birds with four young come to drink from the water-troughs at the old saw-mill on Horse Creek. They were in company with Crossbills and Goldfinches.

186. *Parus atricapillus septentrionalis*. LONG-TAILED CHICKADEE.— Common resident in both counties. Nests in small deep holes of high dead pines. On June 15, 1903, a pair of Chickadees were seen to be greatly excited over a strip of rag hung in a pine on Cottonwood Creek, Dawson County. They hovered about it, meditating an attack, but with each breath of wind the flag fluttered, and frightened away the birds which returned when the wind ceased. This strange behavior on their part induced me to investigate, when I found their nest of wool, hair, and grass in a very small hole below the rag. Four full feathered young were visible, and there may have been more in the background. The birds' fears were entirely allayed when I wrapped the offending rag around the branch. Chickadees are among the tamest birds here, and were welcome visitors to all my hunting camps.

187. *Myadestes townsendii*. TOWNSEND'S SOLITAIRE.— Winter resident; not common. Arrives second week in September and leaves middle of April. I first noticed these birds on Snow Creek, in the Missouri Brakes, when they were frequently seen among the pines during October and November. Another pair were observed on Oct. 8, 1899, in the pines of the divide above the badlands opposite Terry, on the north side of the Yellowstone. I have not seen Townsend's Solitaire on the south side of the river. A pair frequented my ranch in Dawson County during November, 1904, and throughout October and November in 1905. On Nov. 25, these were joined by two others when all four seemed to live near the water troughs and playfully chased each other round and round the cedars. They were not seen after a blizzard on Nov. 28, when the temperature fell to 14° below zero, but they are able to withstand severe cold, as a pair returned at the end of January and remained until April 14. During winter they subsist on cedar berries. On Sept. 9, 1906, a Townsend's Solitaire perched on a trough into which I was pumping water.

188. *Hylocichla aliciae*. GRAY-CHEEKED THRUSH.— Rare. A solitary individual came to my water-troughs (Dawson County) on May 13, 1904. Captain Thorne records "one female, May, 1889."

189. *Hylocichla ustulata swainsoni*. OLIVE-BACKED THRUSH.— Not

common. A regular spring migrant in both counties but seldom seen in the fall. I have not seen more than two at one time, excepting on May 31, 1906, when I counted six together.

190. *Merula migratoria propinqua*. WESTERN ROBIN.—Common summer resident. Arrives about the second week in April. Several pairs nested annually on my ranch near Terry, and one or two pairs in the pine hills at my Dawson County ranch. In 1907, a pair of Robins nested in a shed at Mr. J. H. Price's ranch near Knowlton. The young were hatched on June 22, and were flying about on July 28. In May, when about ranches, the Robin chooses some elevated position, such as the brace of high gate posts, or the cable of a haycarrier, and pours forth its song for half an hour at a time. Although the latter only consists of two notes frequently repeated (*chirrup, chirrup, chirrup*, etc.), it is nevertheless a persistent and extremely pleasing effort. In the fall Robins, old and young, flock together in the pines. A species of red currant (called spice-berry here) ripens about the end of August and proves a great attraction to them. These plants grew around my water-troughs (Dawson County); on August 27, 1904, I watched upwards of seventy Robins which were drinking and feeding on the berries. Six birds could be seen perched on a single bush. The Robins constantly uttered a loud clucking similar to the Old World Blackbird (*Turdus merula*) but I never heard them sing. They remain in the pines until about October 22, when all leave for the south.

191. *Sialia arctica*. MOUNTAIN BLUEBIRD.—Bluebirds are among the earliest spring arrivals here, and may be seen as early as March 20. They are not common in either county except on the spring and fall migrations, when they pass in flocks containing from twenty to thirty birds. A few pairs remain to nest in the pine hills, choosing any convenient cavity in a dead tree.

During June, 1903, a pair of Bluebirds took possession of a deserted Cliff Swallow's nest near the summit of a perpendicular sand rock at my ranch in Dawson County.

ADDENDA.

192. *Nyctala acadica*. SAW-WHET OWL.—Rare. To the best of my knowledge this owl has not before been recorded from Montana. On July 12, 1907, Mr. M. M. Archdale was driving a cattle herd on his ranch near Knowlton when he caught sight of this owl, which had been disturbed by the animals, at the edge of a thicket. Feeling certain that here was a new bird for this locality he most kindly sent his brother post-haste for me while keeping watch on the owl himself until I arrived. It proved to be a bird of the year, and was probably bred in the neighborhood. Other members of the family, from their nocturnal habit, might easily have escaped notice. I watched the owl for a long time. It evidently had a great dislike to the daylight, flitting about, when disturbed, in the depths of the plum and

choke cherry brush where my wife had followed it with a camera giving exposures up to twenty seconds. As soon as she desisted the owl immediately closed its eyes, although its short flights were made with swiftness and vigor.

It appeared to prefer perching at heights of three or four feet from the ground, and refused to stay in the tall box-elders of which there were several in the grove. A shrew-mouse on a branch near the owl had obviously been killed by it. As seen at a distance of eight feet this bird's appearance was as follows.

Upper parts uniform chocolate brown, wings and tail darker; facial disc black, in strong contrast to broad white circles above the eyes, the white including the forehead. Upper breast the color of back, becoming abruptly fulvous on the underparts and giving the impression that beneath the bird is half brown and half buff. Primaries spotted with white. Feet and legs pale buff, bill black, irides orange. Length about seven inches.

77. *Asio wilsonianus*. On May 7, 1907, when walking with Mr. Dan Bowman at his ranch near Knowlton, we saw a Long-eared Owl lying dead upon her six eggs in a deserted crow's nest. We concluded that she died from eating a poisoned bait.

79. *Megascops asio maxwelliæ*. Four, two old, and two young which could scarcely fly, were seen by Bert Bowman at his father's saw-mill on Horse Creek, Custer County, in July, 1897. He again noticed four on the south fork of Sheep Creek, Custer County, in July, 1905.

SUMMER BIRDS OF THE GREEN MOUNTAIN REGION OF SOUTHERN VERMONT.¹

BY FRANCIS H. ALLEN.

So little has been published concerning the distribution of birds in Vermont that I have thought my observations conducted in the breeding-season in the years 1886, 1895, and 1907 in the southern part of the State might be of some interest. These observations were confined to periods of about a fortnight each at a time when practically all birds were settled for the season, and they thus show, so far as they go, the breeding population. In 1886 I spent the time from July 5 to July 19 at Londonderry, in Windham County,

¹ Read before the Nuttall Ornithological Club, Oct. 21, 1907.